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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,649	01/04/2007	Raiko Milanovic	0070996-000052	1499

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BUCHANAN, INGERSOLL & ROONEY PC  
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EXAMINER
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STEVENS, THOMAS H

ART UNIT	PAPER NUMBER
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2121

NOTIFICATION DATE	DELIVERY MODE
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08/20/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,649	<b>Applicant(s)</b> MILANOVIC ET AL.	
	<b>Examiner</b> THOMAS H. STEVENS	<b>Art Unit</b> 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

1. Claims 1-18 were examined.

### ***Section I: Final Rejection***

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamaki (US Patent 6,701,232; hereafter Yamaki). Yamaki discloses a vehicle management system (abstract).

Claim 1. A process control system (e.g., control processes, control loops, figures 6-14)having comprising measurement devices (figure 5, e.g., various sensors)and

Art Unit: 2121

actuators (figure 6, element S11) wherein a) all the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) contain means for information processing (e.g., figure 6, input parameter manipulation i.e., normal or abnormal) and for data interchange between the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11), b) all the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are connected by means for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65), and c) a plurality, preferably all, of the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) have means for data interchange with a service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31) which can be connected.

Claim 2. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 1, wherein the means for information processing (e.g., figure 6, input parameter manipulation i.e., normal or abnormal) and for data interchange between the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are a microcomputer with interface devices for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65).

Claim 3. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 1, wherein the means for data interchange with a service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31) which

Art Unit: 2121

can be connected are an interface device for bi-directional data (wireless bidirectional data exchange, column 4, lines 55-65)interchange and a plug-in apparatus, with the interface device being designed to provide current data (column 5, lines 40-46)relating to the process state for calling up.

Claim 4. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein point-to-point links (wireless data link, column 4, lines 55-65)are produced as means for bidirectional data interchange(wireless bidirectional data exchange, column 4, lines 55-65).

Claim 5. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein a bus system (element 101a, external bus), to which all of the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) are connected, is provided as the means for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65).

Claim 6. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein a laptop or a PDA is used as the service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31)which can be connected.

Claim 7. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein the measurement devices (figure 5, e.g., various

Art Unit: 2121

sensors)and actuators (figure 6, element S11) are designed to carry out plausibility checks and diagnoses (e.g., figure 6, control loop of verifying the actuator).

Claim 8. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) are designed for preprocessing of recorded data (figure 1, element 151).

Claim 9. A method for operation of a process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein data which has been recorded in measurement devices (figure 5, e.g., various sensors)of the system by sensors of the measurement devices (figure 5, e.g., various sensors)and has possibly been obtained by preprocessing is linked to data from other measurement devices, (figure 5, e.g., various sensors)and all of the data is stored (databases, element 151) and is transmitted to respective other measurement devices (figure 5, e.g., various sensors)and to actuators (figure 6, element S11), and data which has been called up from a service device which is connected to measurement devices (figure 5, e.g., various sensors)or actuators (figure 6, element S11) is emitted.

Claim 10. The method as claimed in claim 9, wherein self- diagnoses are carried out in the components of the process control system, (e.g., control processes, control loops, figures 6-14)whose results are likewise stored (databases, element 151) such that they can be called up by a service device.

Claim 11. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 2, wherein the means for data interchange with a service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31)which can be connected are an interface device for bi-directional data (wireless bidirectional data exchange, column 4, lines 55-65)interchange and a plug-in apparatus, with the interface device being designed to provide current data (column 5, lines 40-46)relating to a process state for calling up.

Claim 12. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 11, wherein point-to-point links (wireless data link, column 4, lines 55-65)are produced as means for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65).

Claim 13. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 12, wherein a bus system (element 101a, external bus), to which all of the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) are connected, is provided as the means for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65).

Claim 14. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 13, wherein a laptop or a PDA is used as the service appliance

Art Unit: 2121

(no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31) which can be connected.

Claim 15. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 14, wherein the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are designed to carry out plausibility checks and diagnoses (e.g., figure 6, control loop of verifying the actuator).

Claim 16. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 15, wherein the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are designed for preprocessing of recorded data (figure 1, element 151).

Claim 17. A method for operation of a process control system as claimed in claim 16, wherein: data which has been recorded in measurement devices (figure 5, e.g., various sensors) of the system by sensors of the measurement devices (figure 5, e.g., various sensors) and has possibly been obtained by preprocessing is linked to data from other measurement devices, and all of the data is stored (databases, element 151) and is transmitted to the respective other measurement devices (figure 5, e.g., various sensors) and to actuators (figure 6, element S11), and data which has been called up from a service device which is connected to measurement devices (figure 5, e.g., various sensors) or actuators (figure 6, element S11) is emitted.



Art Unit: 2121

Claim 18. A process control system, comprising: measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11), each of which includes means for information processing (e.g., figure 6, input parameter manipulation i.e., normal/ abnormal)and for data interchange between the measurement devices and actuators (figure 6, element S11); means for interconnecting the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65); and means, provided with multiple ones of the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11), for data interchange with a service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31)which can be connected.

## ***Section II: Response to Arguments***

### ***Specification***

4. Withdrawn.

Art Unit: 2121

5. Applicants are thanked for addressing this issues; however, the arguments presented are non-persuasive in view of the prior art since, as stated in the rejection above, the prior art does teach bidirectional signals for information exchange. Rejection stands.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715.

Art Unit: 2121

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Albert Decady (571-272-3819). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

/Albert Decady/  
Supervisory Patent Examiner  
Tech Center 2100

/Thomas H. Stevens/

Examiner, Art Unit 2121